

Quantitative SERS-based detection using Ag-Fe₃O₄ nanocomposites with internal reference

Padmanabh Joshi, Yan Zhou, Tevhide Ozkaya Ahmadov, Peng Zhang*

Supporting Information

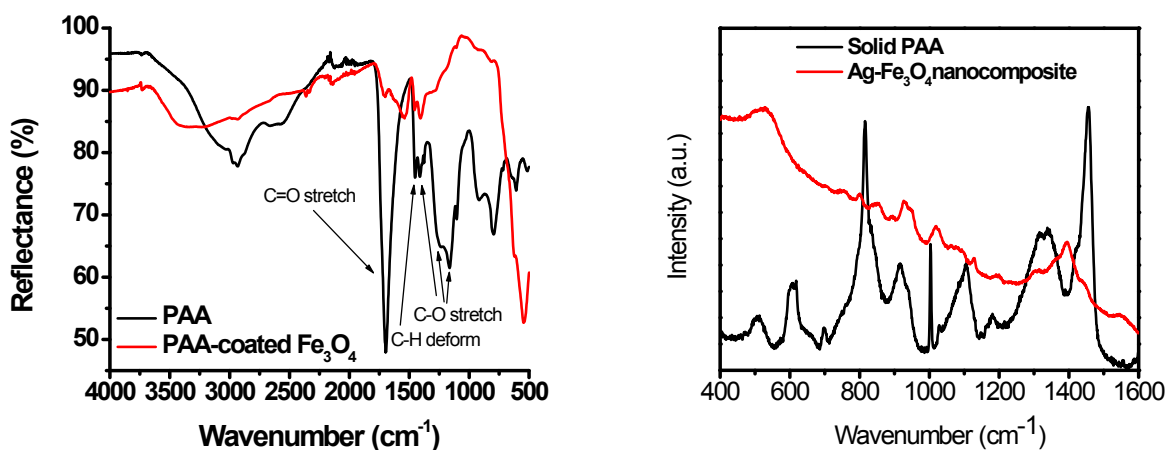


Figure S1. (Left) FT-IR spectra of PAA and PAA-coated Fe₃O₄ nanoparticles. (Right) Raman spectra of PAA and Ag-Fe₃O₄ nanocomposites.

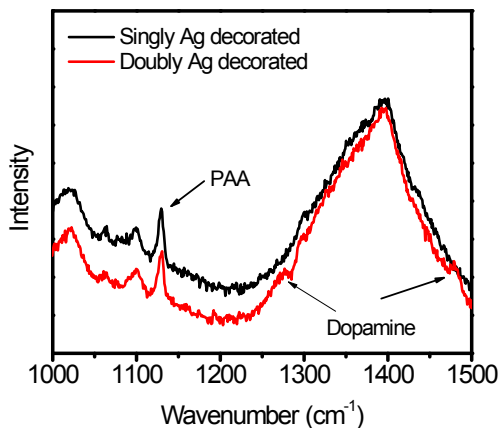
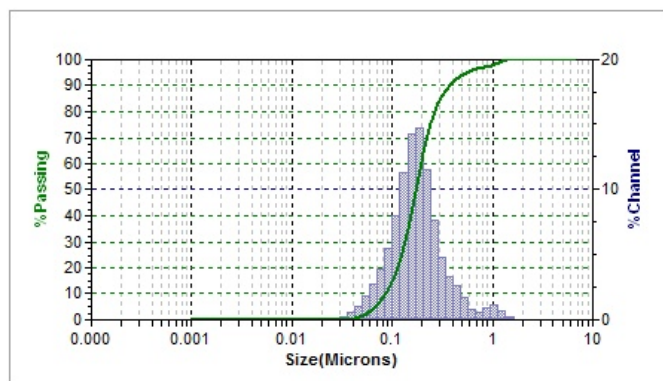


Figure S2. SERS measurements of dopamine using singly silver decorated and doubly silver decorated Ag-Fe₃O₄ nanocomposites.



Figure S3. Demonstration of magnetic property of the Ag-Fe₃O₄ nanocomposites.



Zeta potential (mv): -9.61

Figure S4. Dynamic light scattering and zeta potential measurements of the Ag-Fe₃O₄ nanocomposites in water.

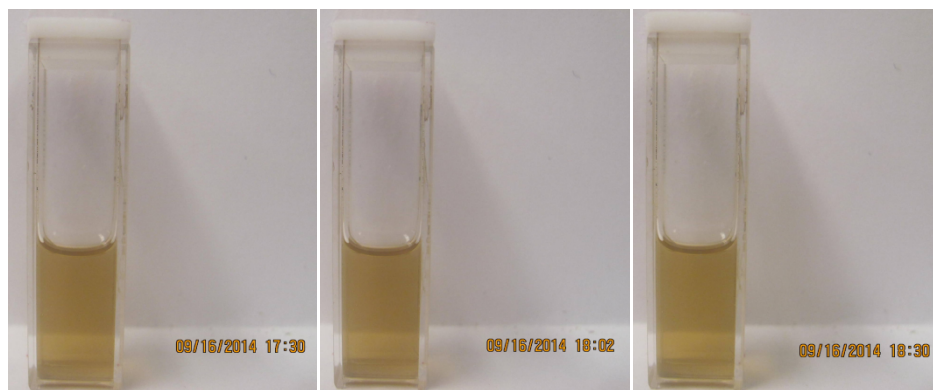


Figure S5. Photos of the Ag-Fe₃O₄ nanocomposites in water over time showing their stability.

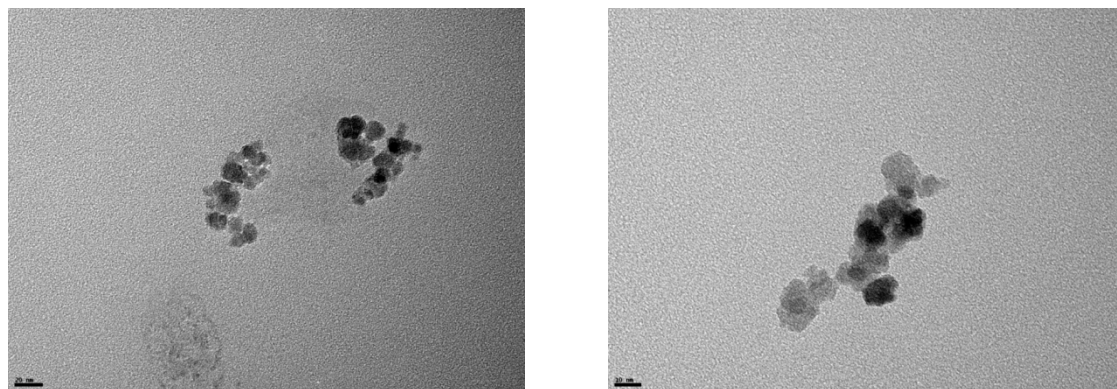


Figure S6. More TEM images of the Ag-Fe₃O₄ nanocomposites. Scale bar is 20 nm.